CORESTA SMOKE STUDY GROUP

FLORENCE, ITALY, 1983

MINUTES

Thursday, 27 October, 1983

9.00 a.m. Opening Session

D.T. Westcott, Chairman of the Group, welcomed the participants and looked forward to a fruitful meeting. He thanked the former Chairman, Dr. L. Hjern (Sweden), for his work on behalf of the Smoke Group, and regretted that he was unable to attend our meeting in Florence. He also thanked the Italian Monopoly, with special reference to N. Carugno, for having invited the Smoke Group to Florence and for having provided so much help to all participants.

N. Carugno then took the opportunity to welcome all members of the Group to Florence and to announce that in future he would be replaced in the Smoke Group by Mrs. M. Neri. He would, however, continue to attend the Technology Group meetings. The Chairman thanked N. Carugno for his participation in the work of the Group over the years. He went on to convey the apologies of H. Kaneko (Japan) who was unable to join the meeting and also expressed his and the Group's wishes for the speedy recovery of T. Osdene who was indisposed. He then announced four papers which were not listed in the schedule circulated to Smoke Group members and made the necessary modifications to the Agenda for the next two days.

9.15 a.m. Working Session

The following topics were raised:

- 1. 8th Congress of CORESTA (Vienna, October 1984)
 - D.T. Westcott reminded members that H. Klus wished to receive for the Vienna Congress a number of original papers of a good scientific level. (Titles to be given before the end of December 1983, and summaries before the end of March 1984.)
- 2. Evaluation of the CORESTA Bulletin

The Scientific Commission decided it was necessary and desirable to continue to publish the CORESTA Bulletin, although it is relatively costly to CORESTA, both in terms of effort by the General Secretary and funds. The opinions expressed were generally in favour of maintaining the Bulletin and it was considered to be very useful to smaller organisations with no other significant information sources. Furthermore, it was probably less expensive than a data bank. A member raised the question of continuing with bilingual publishing (English/French: systematic translation of the authors' summaries into the second language) which increases the amount of work for the General Secretary and demands much corrective editing. Other members, however, were firmly in favour of the present layout which is of value to many more people than is the case with a single language edition.

3. Report on the Scientific Commission Meeting

(Cape Town, South Africa, 16 - 17 May, 1983)

As B. Akehurst, Chairman of the Scientific Commission and delegate to the Agronomy Group was present in the Conference Room, D.T. Westcott asked him to speak about the Cape Town Meeting. The main features of the summary given by B. Akehurst were as follows:

The Scientific Commission was unanimous in requesting the Reading Committee to be more selective and critical in their choice of papers — but to pay due regard to the differences in experience and resources of the country of origin.

The difficulties experienced by the General Secretary in Paris - with regard to both financial and material resources - made it necessary for the Commission to review the activities of CORESTA. This involved discussing the need to continue with the publication of the Bulletin, to maintain the blue mould warning service and also the desirability of providing the General Secretary with a data handling system. B. Akehurst went on to say that the Scientific Commission would like to have the views of the Smoke Group members on these matters. The view had been expressed at the Scientific Commission that the replacement of Chairman and Secretaries was too frequent and that it gave rise to a break in continuity of scientific work. However, the Scientific Commission, after due reflection, recommended that there would be no change in the election procedures.

Plant Industry Liaison Committee (PILC)
(See report by T. Osdene presented at Winston-Salem).

Further consideration of the PILC Report resulted in A. Beuchat, Agronomy Group, being asked to attend the Florence meeting and present to the Smoke/Technology Group meetings, proposals for a closer liaison and collaboration between the Plant Group and the Industry Group which of course A. Beuchat did yesterday (see report of the joint Heeting).

Vienna Congress

The Commission decided to invite an expert in the field of biotechnology to speak at the Vienna Congress. The speaker will be Dr. Schell from the Max Planck Institute, Koln, Federal Republic of Germany.

4. Discussion

Following B. Akehurst's report there were discussions on the following topic:

Scientific Papers

It was suggested that it may be desirable to request each member organisation represented in the various groups to present a minimum number of scientific communications spread over a period of time. This is the procedure currently used at the Tabak Kolloquium.

PILC

The Chairman, D.T. Westcott, opened the discussion by saying that the proposals put forward by A. Beuchat yesterday should be considered seriously by the Smoke Group so that he could give a positive response to the Scientific Commission.

The question of obtaining analytical data for the Plant Group was discussed and it was finally decided that the Plant Group should put forward experimental proposals for collaboration in the areas of bulk curing of Burley and the use of pesticides. The experimental interpretation of the data would be the responsibility of the Agronomists because the Smoke Group is not sufficiently competent in this area.

Sucker Control Chemicals and Pesticides

H. Reif, Chairman of the Pesticide Sub-Group emphasised the need for tobacco companies to obtain from chemical manufacturers, data on the chemicals used in the growing of tobacco. Such data must be provided in order to obtain Governmental approval for the use of such chemicals. He also drew attention to the fact that degradation of chemicals used during the growing of tobacco does not necessarily reduce or eliminate toxicity. A further problem in this area is the adequate and proper control of such chemicals by growers in the many different countries producing tobacco; he concluded by stressing that the tobacco companies must press hard for the growers to avoid the use of unapproved chemicals.

Discussion also took place concerning measures aimed at the sensible use of nitrated fertilizers in order to control to some extent the smoke chemistry. A. Beuchat's previous comments on the need to differentiate between centain varieties of tobacco were noted and the Group decided that these points should be raised at the next Scientific Commission meeting.

10.45 a.m. Session of Papers

10.45 a.m. G. Lionetti and M. Neri (Amministrazione dei Monopoli di Stato, Rome, Italy).

"Determination of moisture in total particulate matters by pyridine-free two components Karl Fischer reagents."

111.15 a.m. A. Helms (Hauni Werke, Federal Germany)
"The influence of different types of filter ventilation
on the composition of the smoke."

11.45 a.m. S.R. Evelyn (BAT Southampton, United Kingdom)
"Study of an alternative method or characterising the particulate matter of cigarette smoke."

- 12.15 p.m. 1.45 p.m. LUNCH
- 1.45 p.m. H. Gaisch (Fabriques de Tabac Reunies, Neuchatel, Suisse).
 "Comments on the methodology of cigarette smoke analysis."
- 2.15 p.m. D.E. Townsend (R.J. Reynolds Tobacco Co. Winston-Salem, USA)
 "The effect of tobacco moisture on the removal of cigarette smoke by the tobacco rod."
- 2.45 p.m. M. Muramatsu (The Japan Tobacco and Salt Public Corp. Yokohama, Japan)
 "Estimation of personal exposure to Tobacco Smoke with a newly developed nicotine personal monitor."
- 3.15 p.m. H.F. Dymond (BAT Southampton, United Kingdom):
 (presented by H.G. Horsewell)

 "An automated gas chromatographic method for the simultaneous determination of nicotine and water in cigarette smoke."
- 3.45 p.m. Coffee break
- 4.00 p.m. Task Force on Automation of nicotine and water determination by GC. (Convener: Dr. J. Hollweg, BAT Hamburg, Federal Republic of Germany). (cf. report below).

Friday - 28 October 1983

- 9.15 a.m. Task Force on Gas Phase (Convener : Dr Joigny SEITA PARIS, FRANCE cf. report below).
- 11.00 a.m. D. Imbery (Rhodia AG, Bremen, Federal Republic of Germany)
 "The measurement of Filter and Tobacco rod harness during smoking with the HDS5-Harness Tester."
- 11.45 a.m. Reports of Sub-Groups and Task Forces

Cigar Sub-Group (report presented by L. Gabriel in place of P. Vander Straeten who was indisposed.)

L. Gabriel stated that studies were in progress in different countries to determine the smoking standards best suited for the analytical smoking of cigars weighing less than 1.5 g, and for cigars weighing more than 5 g. The results will be presented at the Vienna Congress when P. Vander Straeten will present a comprehensive summary of the activities of the Group.

Task Force on the metals in tobacco and smoke (read by D.T. Westcott)

T. Osdene's report referred to eight new papers published since the Symposium at Winston-Salem. T. Osdene reminded members of the Smoke Group that they could obtain printouts

D. Maric-Tesarova, M. Pokrajac and L. Tomic "Research on the content of cadmium in tobacco and its transfer to the particulate phase of smoke."

Pesticide Sub-Group Report (H. Reif, Austria, read by D.T. Westcott).

Interest in the analysis of pesticide residues has diminished during the past few years and has resulted in a decrease in the work load undertaken by the Group. Its activities can be extended if the Plant Group feels it necessary especially with regard to the question of Ridomil and synthetic pyrethroids.

H. Reif informed the Group that he is now with the Degesh Company (pesticides manufacturer, and CORESTA member). The members present were pleased to confirm unanimously.
H. Reif's chairmanship of the Pesticide Sub-Group and the Chairman, D.T. Westcott, agreed to formally write to H. Reif informing him of the Group's continued support for his work.

Task Force on Water and Nicotine Determination by GC (J. Hollweg, BAT Hamburg, Federal Republic of Germany)

The Task Force, constituted at Winston-Salem in 1982 and now made up of 13 members, has focused on the problem of the determination of nicotine. The first meeting in Hamburg compared the work from several laboratories on the effect of analytical parameters and tobacco types on the nicotine values. They also compared the GC method with the standard GORESTA nicotine procedure. Very similar results were obtained with a maximum increase of 10% in values of nicotine obtained by gas chromatography compared with the standard method. J. Hollweg went on to say that the parameters needing evaluation were seen to be type of solvent, internal standard, calibration material and procedure, column material, and the use of a pre-column and splitting system. Two: collaborative trials have been organised, the first concerned with the chemical nature of the nicotine used for calibration purposes (free nicotine, nicotine hydrogentartrate or nicotine salicylate) and the second, on the type of GC stationary phase used. Results were to be presented at the second meeting of the Task Force in Sintra, Portugal, on the 14 November, 1983.

Task Force Gas Phase (C. Joigny, SEITA, Paris, France)

The problem still to be resolved concerns the analysis of nitric oxide in the gas phase of tobacco smoke. The

variation of the results have not changed significantly between the experiments conducted in 1977 and 1981. Details of the instruments given to the co-ordinator by the eleven participating laboratories did not allow him to ascertain clearly the reasons for the discrepancy between results, mainly because the instruments used were very similar. A possible explanation for the difference between results from different laboratories may be due to differences in nitrate contents of the samples. The Task Force therefore decided to undertake a new collaborative trial using two or three types of cigarettes with known nitrate content. The collaborative tests would also include a detailed questionnaire on the experimental procedures used by the eleven laboratories involved.

12.45 p.m. Closing Session

On behalf of all participants, the Chairman, D.T. Westcott, thanked the Italian Monopoly and especially N. Carugno, Madame Neri and their colleagues in Florence for the excellent organisation and welcome that they provided for the Smoke Group Meeting. He took leave of the participants by reminding them of the next meeting in Vienna between 8-12 October, 1984.

The meeting was closed at 1 p.m.

6 February, 1984